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EXPORTS OF PETROLEUM PRODUCTS
THE FIRST YEAR OF 'DEREGULATION' IN REVIEW

National Energy Board
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Executive Summary

As of 1 June 1986, "The Western Accord" had been in effect for one year. In the case of the export of petroleum products, the following identifies the highlights of the first year of deregulation:

. Volumes - from 1 June 1985 to 31 May 1986, exports of petroleum products averaged 18.5 10^3m^3 a day versus 20.0 10^3m^3 per day for the same period a year earlier.

. Prices - when average export prices for petroleum products are compared to average spot prices for products in the United States, the average import cost for products and domestic rack prices, it would appear that exporters generally obtained reasonable prices.

. Industry Trends - truck imports of light products are increasing the level of competition in markets close to the United States border;

- when oil prices were falling in early 1986, exports were made at prices below those prevailing in Canada;
- more independent resellers are exporting petroleum products which is improving the viability of this sector; and
- Canada's trade in petroleum products is becoming more widely distributed internationally.

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EXPORTS OF PETROLEUM PRODUCTS - THE FIRST YEAR OF 'DEREGULATION' IN REVIEW

Introduction

From 1973 to 31 May 1985, Canada had a system of administered oil prices and controls on the exportation of petroleum products and from May 1982 on the importation of heavy fuel oil. In March 1985, the Governments of Canada, Alberta, British Columbia and Saskatchewan signed "The Western Accord" which called for the 'deregulation' of Canadian oil pricing and marketing, effective 1 June 1985.

In the case of petroleum products, the issue of licences covering short-term exports subject to Board authorization was replaced by open orders of the Board issued to registered oil exporters. These orders, specifying neither volumes nor prices, authorize exportation for a period not exceeding one year. The move to export orders significantly reduced the regulatory burden faced by potential exporters. The orders require monthly reports to be submitted to the Board of actual exports made and prices obtained. These reports provide a basis upon which the Board provides advice to the Minister on export matters pursuant to the Western Accord.

Imports of heavy fuel oil and exports of asphalt can now be made without any authorization.

June 1, 1986 marks the first anniversary of the end to the complex system of administered oil prices and the removal of export and import controls. We have taken this opportunity to review the exportation and importation of petroleum products during this first year of deregulation.

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Volumes

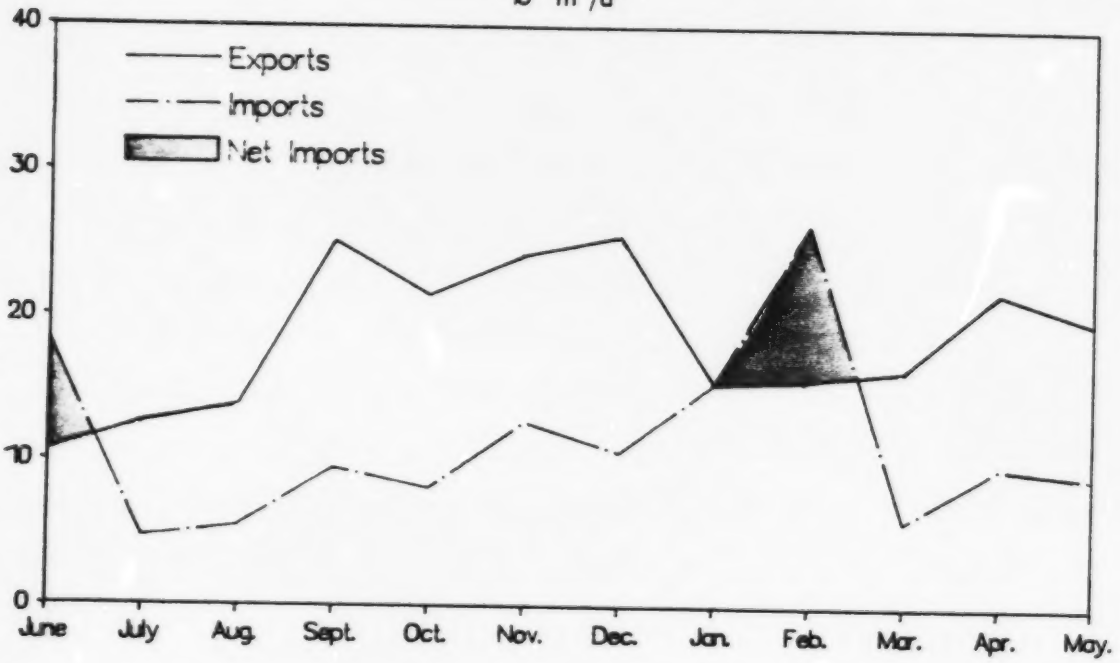
Exports - During the first year of deregulation, exports of petroleum products averaged 18.5 10^3m^3 a day versus 20.0 10^3m^3 per day for the comparable period of a year earlier (see Appendix I). Figure 1 summarizes both exports and imports of products since 1 June 1985.

Figure 1

Exports and Imports of Petroleum Products

June/85 May/86

10^3 m /d^3



For a variety of reasons, exports of products in June 1985 at 10.0 10^3m^3 a day were the lowest of any of the first 12 months of deregulation and exports during the first three months were fairly low averaging only 12.0 10^3m^3 per day. In May 1985, the industry moved as much product as possible to offshore markets in order to take final advantage of the rebates of the petroleum compensation charge and the Canadian

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ownership special charge on volumes of products exported. This inventory drawdown reduced the amount of products available for export during the early months of deregulation at a time when the industry was adjusting to the new operating environment. At that time Canadian feedstock costs were marginally higher than those in the United States.

By September 1985, export volumes began to grow and during the next four months doubled to 24 10^3m^3 a day as companies became familiar with the deregulated system. Large volumes of middle distillate were exported, especially from Ontario, as spot prices in the United States peaked in September and October. In November and December, Ontario refiners exported large volumes of heavy fuel oil in order to reduce inventories prior to the close of the navigation season which is their normal practice. Also, during this period, an eastern Canadian refiner began to export to an offshore supplier under a foreign processing agreement.

During the first quarter 1986, exports dropped to an average of 16 10^3m^3 a day caused primarily by the dramatic drop in petroleum prices which affected all oil markets. The closed navigation season was also a contributing factor with respect to deliveries from Ontario. In this period, Irving emerged as the largest exporter of petroleum products from Canada and this continued through May.

In April and May, exports rose to about 21 10^3m^3 a day as markets stabilized coupled with the opening of navigation on the Great Lakes and St. Lawrence River. British Columbia refiners exported significant volumes of gasoline and distillate to the United States west coast during these months, in response to the demand created when California refiners experienced equipment problems.

During the year significant volumes of exports were made from all regions of Canada (see Appendix II).

Imports - Prior to 1 June 1985, heavy fuel oil was the only petroleum product subject to import controls. These controls were put in place in May 1982 in order to discourage imports of heavy fuel into areas served by natural gas. As of 1 June 1985, imports of heavy fuel oil, as well as all other products, were possible without any government authorization. However, importers advise the Department of Energy, Mines and Resources monthly of the amount and prices of any imports that were made in the previous month.

Product imports averaged 11.2 10^3m^3 a day during the first 12 months of deregulation and were generally below the monthly level of exports - the exceptions being June 1985 and February 1986 (see Figure 1). Imports were high in June as companies attempted to maximize the advantages of the oil import compensation program by increasing their May 1985 loadings for importation in June. In February 1986, large imports of heavy fuel oil were made into the Atlantic Provinces and light products into Quebec as importers sought to secure the benefits of lower priced products available in offshore markets and to balance supplies following the closure of Gulf's Montreal refinery.

In the July through October period, imports were relatively low but began to pick-up in November and December when companies had cargoes delivered into Quebec prior to the ice build-up in the St. Lawrence River. Two other developments concerning imports are worth noting as well. Firstly, from late January to early April, truck imports of low priced gasoline and diesel fuel by independent resellers were made into southern Ontario which led to a more rapid decrease in retail prices than would otherwise have been the case. (We understand that certain Ontario independent resellers are now looking to the United States as a firm supply source. It is reported that three United States suppliers are anxious to secure these independents as long term

rather than spot customers.) Secondly, in April and May, low cost imports of heavy fuel oil were made into Quebec for supply to consumers formerly using natural gas. This substitution from natural gas to fuel oil has caused concern in the natural gas industry.

Companies involved in the importation of petroleum products include eastern Canadian refiners, east coast utilities, Quebec terminal operators and several Ontario based independent resellers.

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Participants in Export Sales

June 1, 1985 brought the virtual elimination of the regulatory burden associated with exportation of petroleum products. This has encouraged a variety of companies to expand their horizons and seek export sales. During the first year of deregulation, 46 different companies exported a total of 6 872 10^3m^3 of motor gasoline, middle distillate, aviation turbine fuel, heavy fuel oil and partially processed oil (see Table I).

Irving was the largest single exporter shipping out 1 527 10^3m^3 and Imperial Oil ranked second exporting 1 290 10^3m^3. Nine of the top 10 exporters were refiners exporting 5 810 10^3m^3 or 85 percent of the volume moved. Olco, the sixth ranked exporter, was the only non-refiner to place in the top 10. Since the introduction of deregulation, 32 independent resellers have delivered products to the export market. Although the volume moved by some of these resellers has not been large, it has enhanced their competitive position and thus the viability of the independent marketing sector.

Export sales in total returned approximately $1.6 billion to Canada. Refiners received about $1.4 billion of this amount while independents sold some $200 million worth of products in the export market.

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TABLE I

EXPORTERS OF PETROLEUM PRODUCTS
JUNE 1985 TO MAY 1986

EXPORTER	TOTAL VOLUME (m^3)
Irving Oil Limited	1 526 718.7
Imperial Oil Limited	1 289 546.1
Shell Canada Limited	798 003.8
Petro-Canada Inc.	620 086.1
Sunoco Inc.	318 698.1
Olco Oil	308 268.7
Petrosar Limited	274 573.0
Ultramar Canada Inc.	259 103.7
Chevron Canada Limited	218 976.1
Turbo Resources Limited	200 581.8
Texaco Canada Inc.	157 186.8
Gulf Canada Corporation	140 988.7
Comtrade Petroleum Inc.	128 922.2
Consumers Co-operative Refineries Ltd.	121 556.5
Sipco Oil Limited	108 617.0
Others (21 companies)	400 366.6
TOTAL VOLUME	6 872 193.9

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An International Perspective to Canada's Trade in Petroleum Products

During the first 12 months of deregulation, Canada's exports and imports of petroleum products have involved a number of countries which clearly indicates that Canada is an integral part of the international energy community.

With respect to exports, Canada made deliveries to 10 different countries (listed below) and, as one would expect, the United States continues to be our largest buyer (see Figure 2). In that regard, product exports were made to the following 27 states in that country. Each state bordering on Canada, every state in New England and the majority of U.S. coastal states received products from Canada.

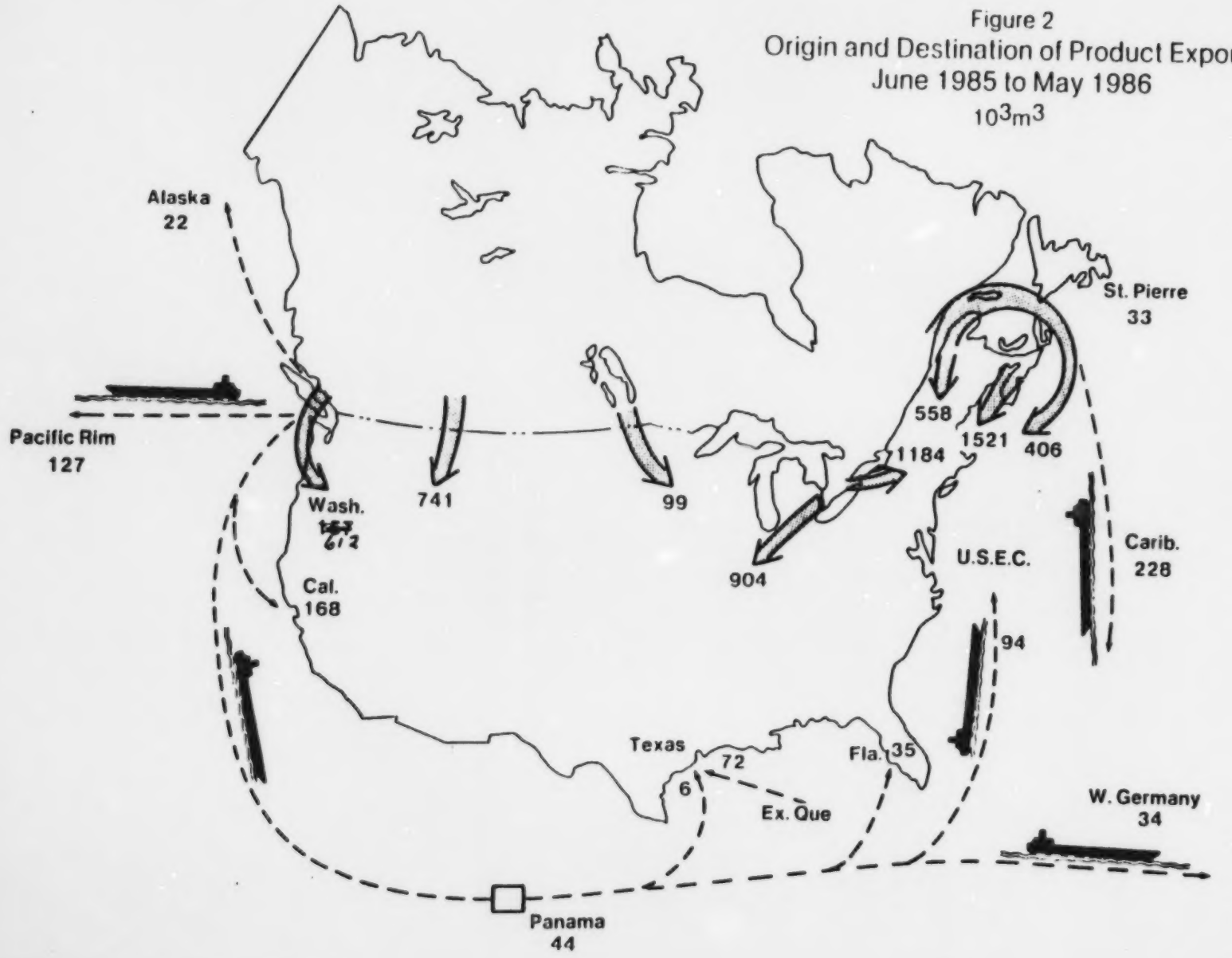
Destination Countries	U.S. Destinations by State	
Cuba		
Germany	Alaska	New Jersey
Greenland	California	New York
Japan	Connecticut	North Dakota
Korea	Florida	Ohio
Netherlands Antilles	Hawaii	Oregon
Panama	Idaho	Pennsylvania
Puerto Rico	Illinois	Rhode Island
St. Pierre et Miquelon (Fr.)	Indiana	South Dakota
United States	Maine	Texas
	Massachusetts	Utah
	Michigan	Vermont
	Minnesota	Washington
	Montana	Wisconsin
	New Hampshire	

In the case of product imports, the United States and Venezuela have been Canada's two principal offshore suppliers but a total of 17 countries have supplied products to Canada in the past year including:

Algeria	India	Soviet Union
Belgium	Israel	Spain
Brazil	Italy	Turkey
France	Netherlands	United Kingdom
Greece	Portugal	United States
	Saudi Arabia	Venezuela

With respect to imports from the United States, many originated from the Gulf Coast.

Figure 2
Origin and Destination of Product Exports
June 1985 to May 1986
$10^3 m^3$



Export Prices

As can be seen from our earlier discussion, petroleum products move from numerous Canadian locations to a variety of export markets and, consequently, compete against a wide spectrum of prices. Export revenues depend on several factors including access to markets, the quality of the product delivered and an individual exporter's particular circumstances.

Access to Markets - One market that offers eastern Canadian exporters the highest prices is St. Pierre et Miquelon because exports are made in relatively small volumes and because it has yet to demonstrate that it has another economic source of supply. A market, like Detroit, in close proximity to the Canadian refinery centre of Sarnia may perhaps offer a higher return than a movement covering several thousands of miles such as the shipments from Vancouver to the Far East.

The availability of transportation also affects what type of price an exporter may expect. Exporters on tidewater can move cargo or barge lots whereas companies in the Prairies generally move their products to the United States via tank truck. The cost of transportation has a significant impact on the amount an export sale will yield.

Product Quality - As one would expect, higher quality products normally return better prices. For example, unleaded gasoline obtains a premium over leaded gasoline. In the case of exports of gasoline to the United States, special blends must be prepared. The United States has lower lead requirements than Canada and unleaded gasoline must be free of MMT (an octane improver using a manganese compound unacceptable in the United States).

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Low pour diesel fuel realizes higher prices than high pour heating oil as does low sulphur heavy fuel oil compared to higher sulphur fuel oil. For example, exports of .7% sulphur heavy fuel oil to Wayne County, Michigan get better prices than 2.2% sulphur material to Buffalo.

Individual Exporter's Circumstances - An individual company's particular circumstances are often one of the more critical elements in export pricing. Any Prairie refiner with a continuing surplus of heavy fuel oil is too distant from heavy fuel export markets to obtain a high price for its export sales of this fuel. On the other hand, an Ontario refiner capable of securing a term contract with United States' utilities for its surplus heavy fuel, can enjoy very favourable returns. One refiner has a continuing problem with surplus production of a low quality motor gasoline blending component. This material has no market in Canada and yields a very low price in the export market. Certain companies export gasoline and distillate into locations at the end of the United States distribution chain and, consequently, obtain relatively high prices. Many independent resellers deliver tank truck volumes directly to retail outlets in the United States thus receiving higher prices than companies selling through middlemen. Of course, operating problems faced by the industry such as those associated with inventory containment, refinery imbalances and refinery upsets will always be important when pricing petroleum products for the export market.

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Average Export Prices

Rather than dwelling on particular prices which may vary for the reasons previously stated, we have averaged export prices in order to provide the general price trends during the first year of deregulation. Figure 3 in summarizing the average export prices for motor gasoline, middle distillate and heavy fuel oil reveals no particular surprises. Product prices followed the general trend of international crude oil prices. Prices were relatively stable from June to December but beginning in January prices for both crude oil and products began their dramatic decline; in April, prices began to stabilize once again but at a much lower level.

The average price for exports of gasoline is above that for distillate for the months of June through October but then falls below the average distillate price during the peak demand season for distillte - November to March. Again in April and May, the gasoline price rose above the distillate price. This tracks the seasonal price pattern exhibited by light products.

Heavy fuel oil is a by-product of refinery operations and normally is priced lower than light products. As one would expect, the average price for exports of heavy fuel during the past year was below those for the light products but does approach the gasoline price in March. The average heavy fuel export price peaked in January. It is interesting to note that January recorded the lowest volume of heavy fuel exported of any month during year one of deregulation. In January, there were no distress export sales; the statistics were affected by one cargo which was exported at a relatively high price.

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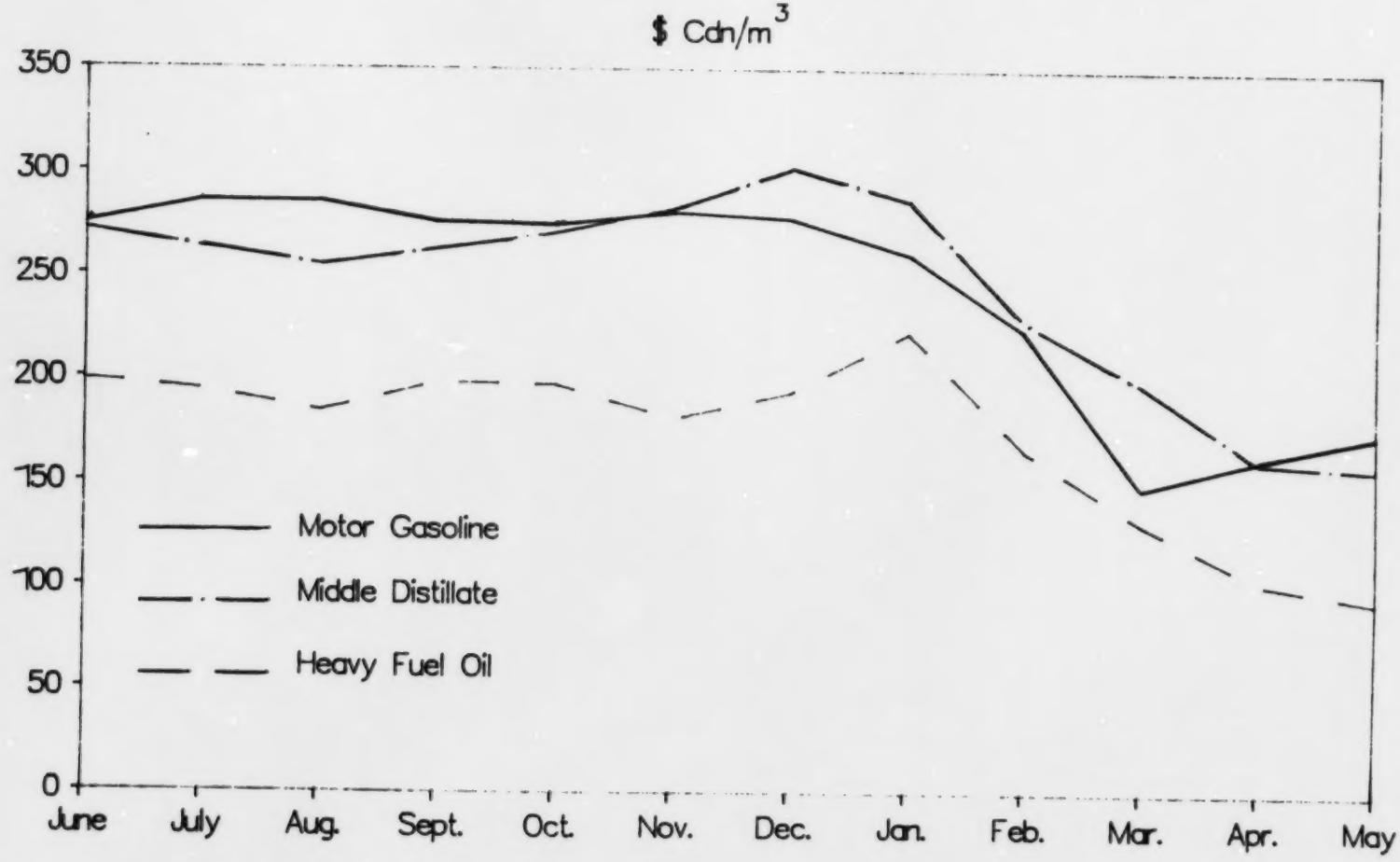
Figure 3

Average FOB Prices for Canadian Product Exports



Average Export Prices VS Average Spot Prices in the United States

Exports of petroleum products are either surplus because of being necessarily co-produced when making other products needed in Canada or are products made specifically for export. In both of these cases, the products often compete against spot product prices in the United States and these spot prices are normally a measure of the cost of marginal supply to U.S. customers. Spot prices are normally related to cargo quantities and are increasingly becoming a yardstick for truck deliveries from Ontario and the Prairie Provinces. The "Oil Price Information Service" average United States spot prices for motor gasoline and middle distillate provides a convenient bench-mark against which to measure the reasonableness of Canadian export prices.

Motor Gasoline - Figure 4 compares the average export price for motor gasoline with the average United States spot prices for gasoline. From June to December 1985, when gasoline prices were fairly stable, the average export price was either marginally above or marginally below the spot price in the United States. When the market was falling from January to March, the average export price for gasoline was higher than the United States spot prices. But when prices in the United States began to firm in April and May, the average export price was lower than prices south of the border. For the total year, the average export price was $\$240/m^3$ versus an average United States spot price of $\$244/m^3$.

Middle Distillate - Figure 5 shows the average export price for middle distillate and the spot price for No. 2 fuel in the United States. In June and July, the average export price for distillate was higher than the United States spot price and the two prices were virtually identical in August. From September to November, spot prices for No. 2 fuel in the United States were very strong and it was during this time when Canada's average export price was below the United States price. In December, the two prices

Figure 4

Motor Gasoline

Average Export Price vs U.S. Spot Price

$ Cdn./m³

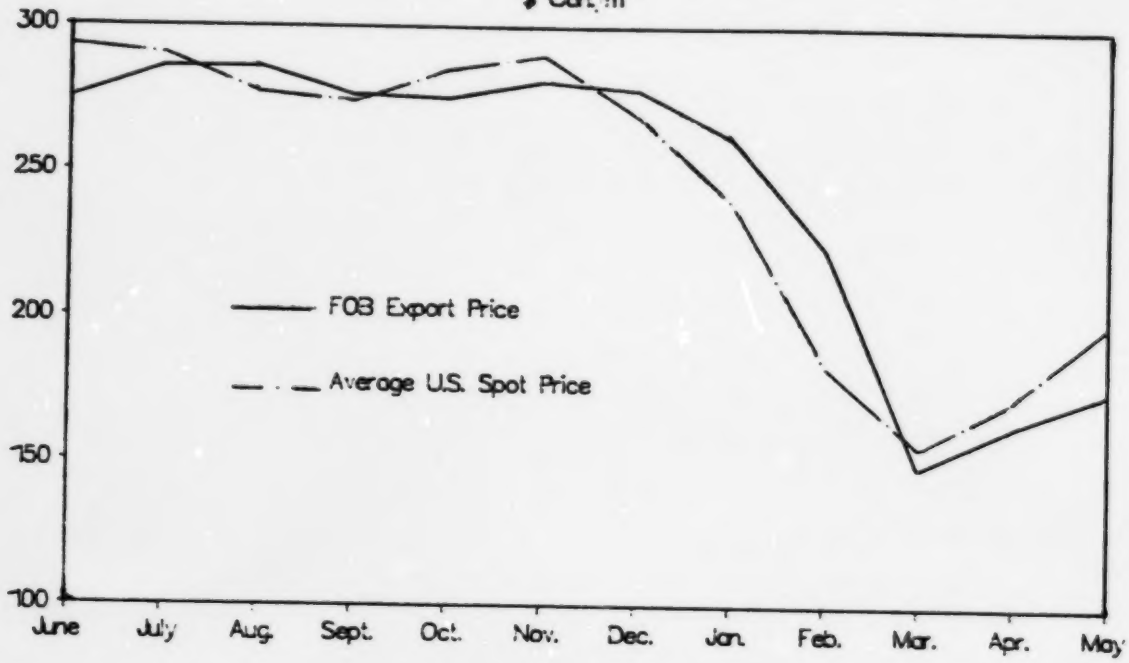
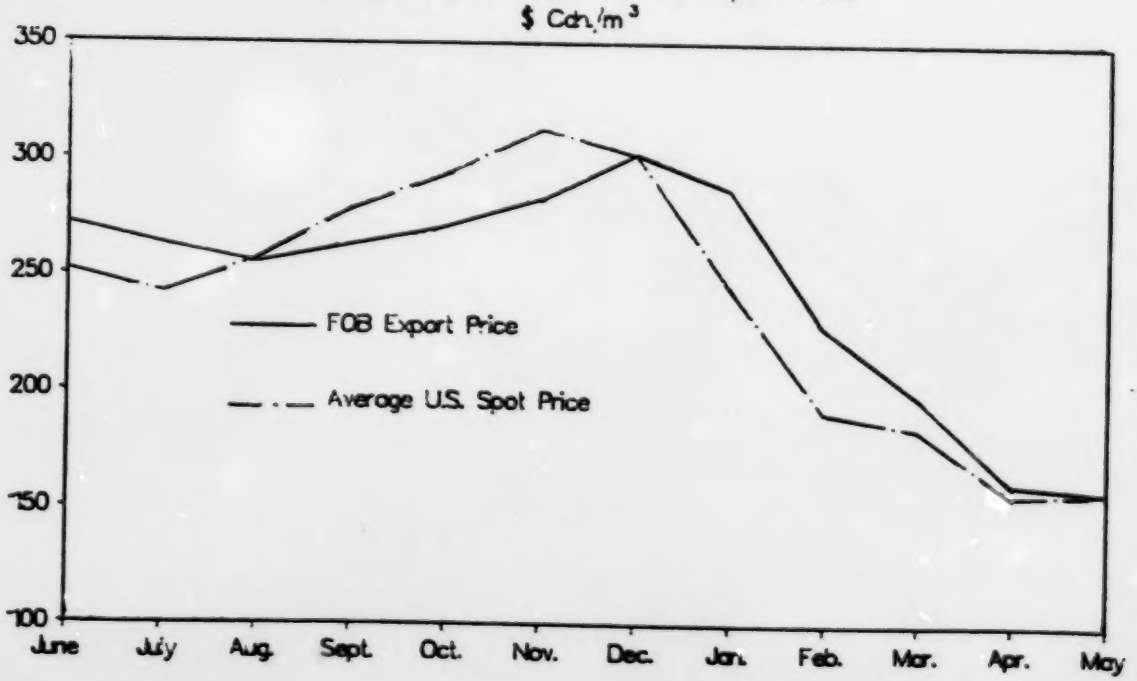


Figure 5

Middle Distillate

Average Export Price vs. U.S. Spot Price

$ Cdn./m³



were again about equal but for the balance of the period our average export price was above the United States spot price. In eight of the first twelve months of deregulation, Canada's average export price was higher than the spot price for No. 2 fuel in the United States. For the year in total, the spot price below the border was $\$239/m^3$ while the average export price was $\$250/m^3$.

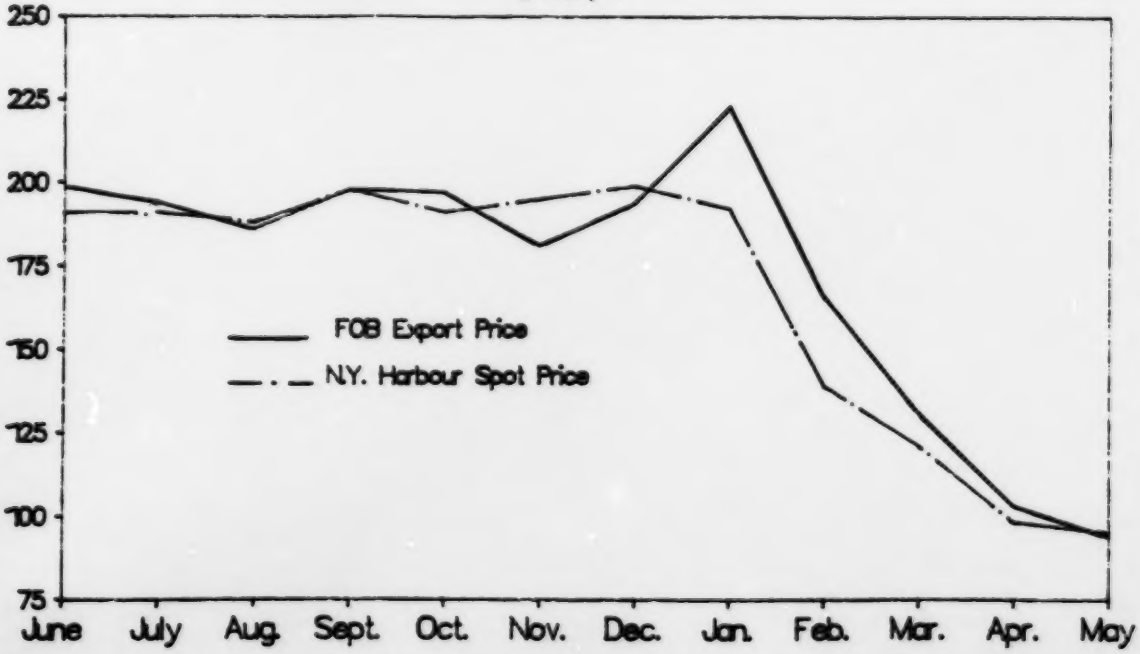
Heavy Fuel Oil - The Oil Price Information Service does not carry an average United States spot price for heavy fuel oil. For comparison purposes, we chose the New York spot price for 2.2% sulphur material as reported by Oil Buyers' Guide. Figure 6 displays the average export price for heavy fuel oil and the New York spot price for heavy fuel. From June to December, the two prices were very close. In January, the export price peaked for the reasons indicated earlier and from January to May, when the market was falling, the average export price was higher than the New York spot price. For the full year, the export price averaged $\$178/m^3$ somewhat above the New York price of $\$166/m^3$.

Figure 6

Heavy Fuel Oil

Average Export Price vs U.S. Spot Price

$ Can./m^3

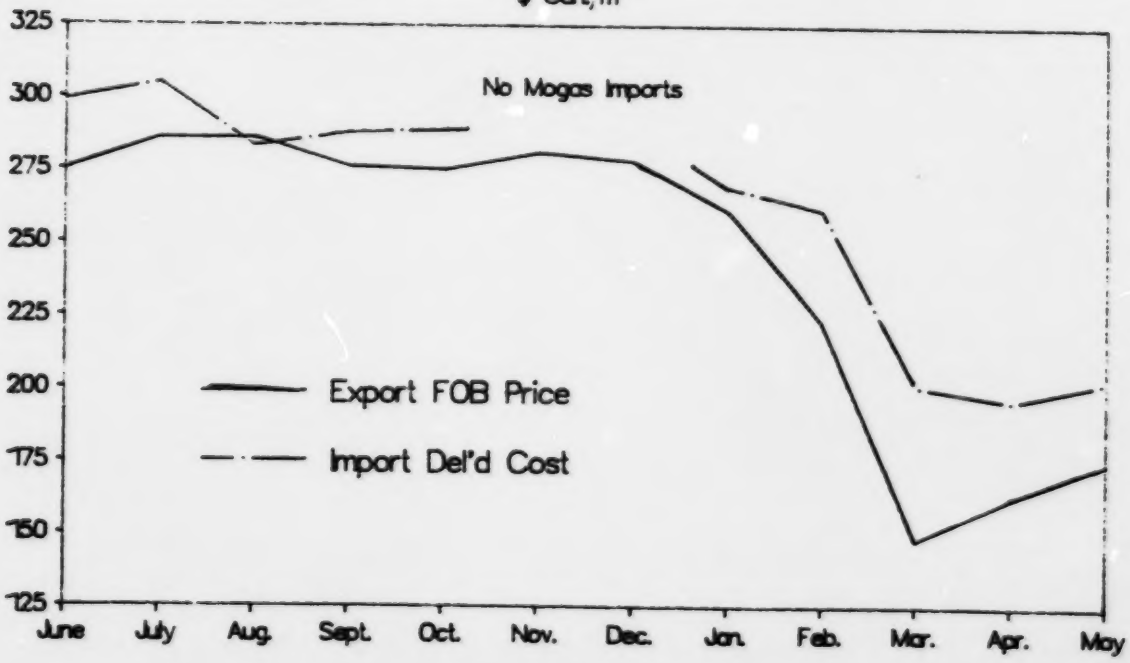


Average Export Prices VS Average Import Cost

In the first year of deregulation, Canada was a net exporter of petroleum products. Because Canada is also an importer of product, a comparison can be made of the average prices exporters received with the average costs experienced by importers.

Motor Gasoline - Figure 7 shows the average export price and import cost of gasoline. The import cost is generally above the export price. No imports of gasoline were made in November or December. For the total year, the average export price was $\$240/m^3$ compared to an average import cost of $\$261/m^3$. Imports primarily consist of unleaded gasoline whereas exports of both leaded and unleaded grades are made. This would likely account for most of the 2.1¢ a litre difference between the two price levels.

Figure 7
Motor Gasoline
Average Export Price vs Average Import Cost

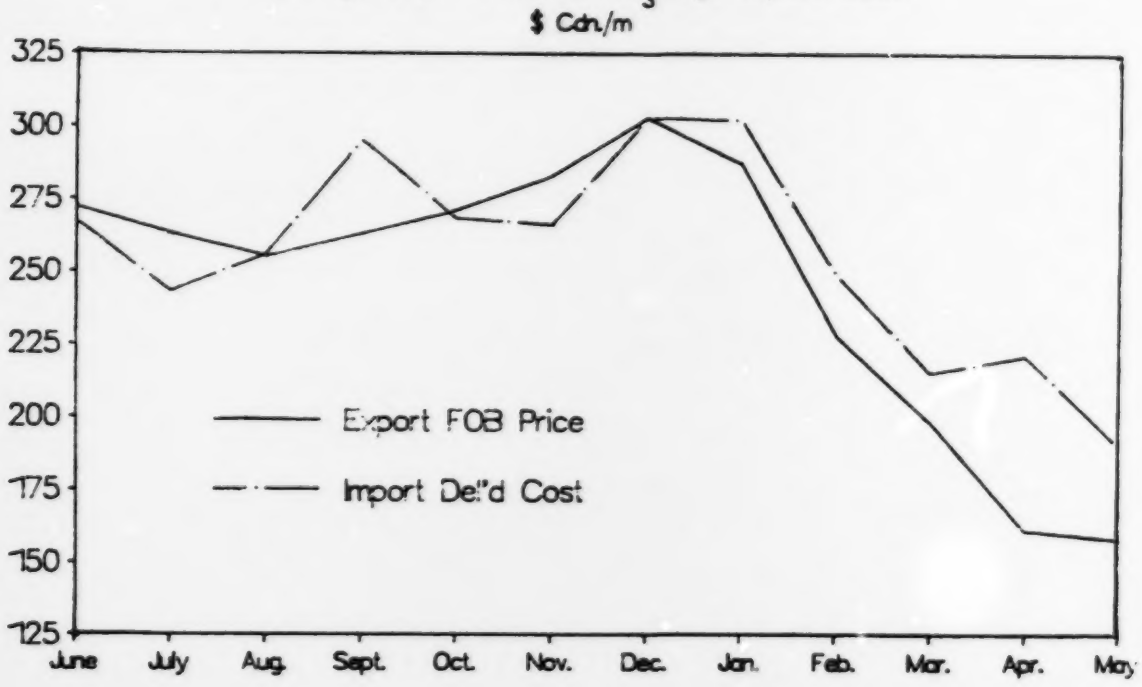


Middle Distillate - The average export price and import cost of middle distillate are displayed in Figure 8. Import costs peaked in September and January when offshore prices were high. There is generally little to choose between these two prices but the import cost is marginally higher than the export price. The average export price for the entire year was $\$250/m^3$ while the average import cost was $\$262/m^3$. This difference represents about 1¢ a litre and is not significant.

Figure 8

Middle Distillate

Average Export Price vs Average Import Cost



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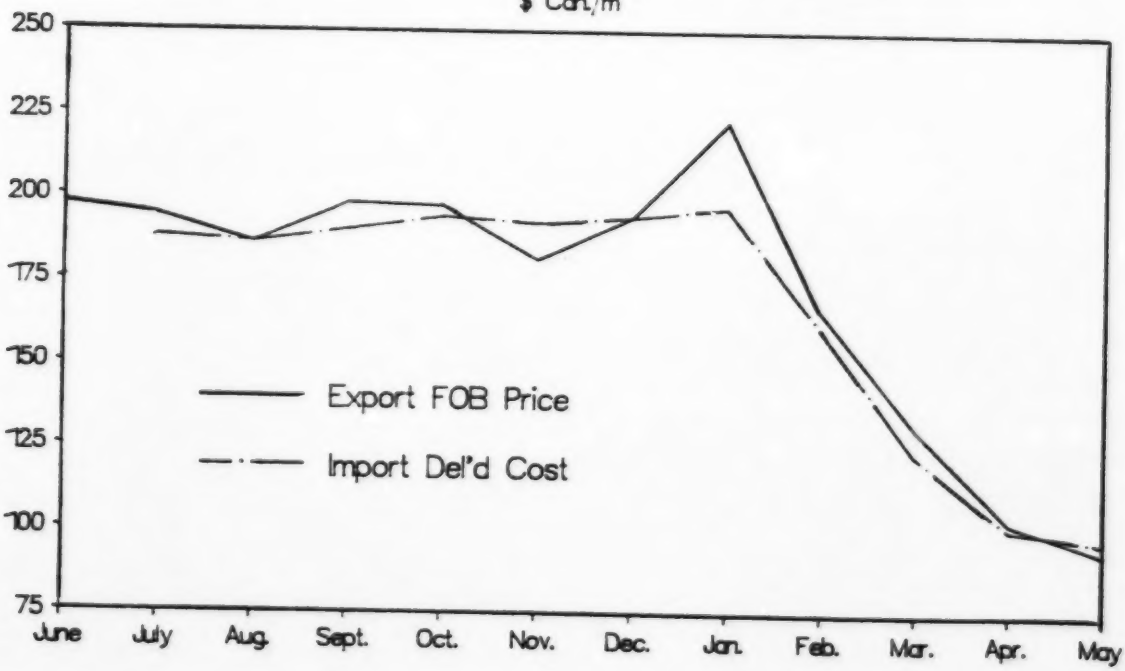
Heavy Fuel Oil - In Figure 9 we compare the average export price for heavy fuel oil with the average import cost of this fuel. These two prices are very close in most months with the export price usually slightly above the import cost. The largest difference occurred in January when the export price was about $\$26/m^3$ (ie. \$4.00/bbl.) above the import cost. In January, a cargo of heavy fuel was exported at quite a high price which increased the monthly average price. The average export price of heavy fuel oil during the first year of deregulation at $\$178/m^3$ was somewhat higher than the average import cost of $\$165/m^3$. This occurs because exports from Ontario are generally priced higher than are imports into the Atlantic Provinces.

Figure 9
Heavy Fuel Oil
Average Export Price vs Average Import Cost



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Export Prices VS "Rack Prices"

At the onset of deregulation, Imperial Oil introduced a new system for pricing certain petroleum products which has been called "rack pricing". Shell and Ultramar also introduced rack pricing soon afterwards. The prices are readily available and these new systems have received a certain notoriety when, in October 1985, the Restricitive Trade Practices Commission (RTPC) reviewed these new pricing procedures. (In its recently released report the RTPC found that "rack pricing adversely affect(s) competition insofar as it involves openly stated policies that confidential discounts will not be granted off published prices").

At the RTPC Inquiry it was explained that most export customers subscribe to "Telerate" which is an on-line computer system where customers have a terminal in their offices that indicates current selling prices for petroleum products. It was stated that the rack prices go into Telerate and these represent export prices with no discounts being offered from these prices.

Against this background, we felt it would be appropriate to review export prices against average rack prices. We chose exports from Ontario and the rack price for Toronto as the basis for our comparison. We have reviewed average rack and export prices in other regions and they generally follow the Ontario pattern.

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Motor Gasoline - Figure 10 outlines the average rack price for leaded gasoline at Toronto against the average price of exports of gasoline from Ontario. In all months, with the exception of July and August, the rack price was above the export price. In June, the difference was 3¢ a litre and from September to January the differential was between 1 and 3¢ a litre. By February, the difference grew to about 5¢ a litre and, in March, to 10¢ a litre and by late April the export price was approximately 4¢ a litre below the rack price. At the end of May the difference was only 2¢ a litre. In February and March, there was considerable media attention focused on this issue, to the point where the Manitoba government launched an inquiry to look into the pricing of petroleum products in the province.

Middle Distillate - In Figure 11 we show the average price for exports of distillate from Ontario and the average rack price for furnace oil at Toronto. For the period June 1985 to January 1986, the prices were very close. However, in February, the export price fell below the rack price by about 7¢ a litre and, in March, the difference was almost 10¢ per litre. In April, the differential was reduced to 3¢ a litre and by May the difference increased to 4¢ a litre.

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FIGURE 10

MOTOR GASOLINE
ONTARIO EXPORT PRICE VS TORONTO RACK PRICE

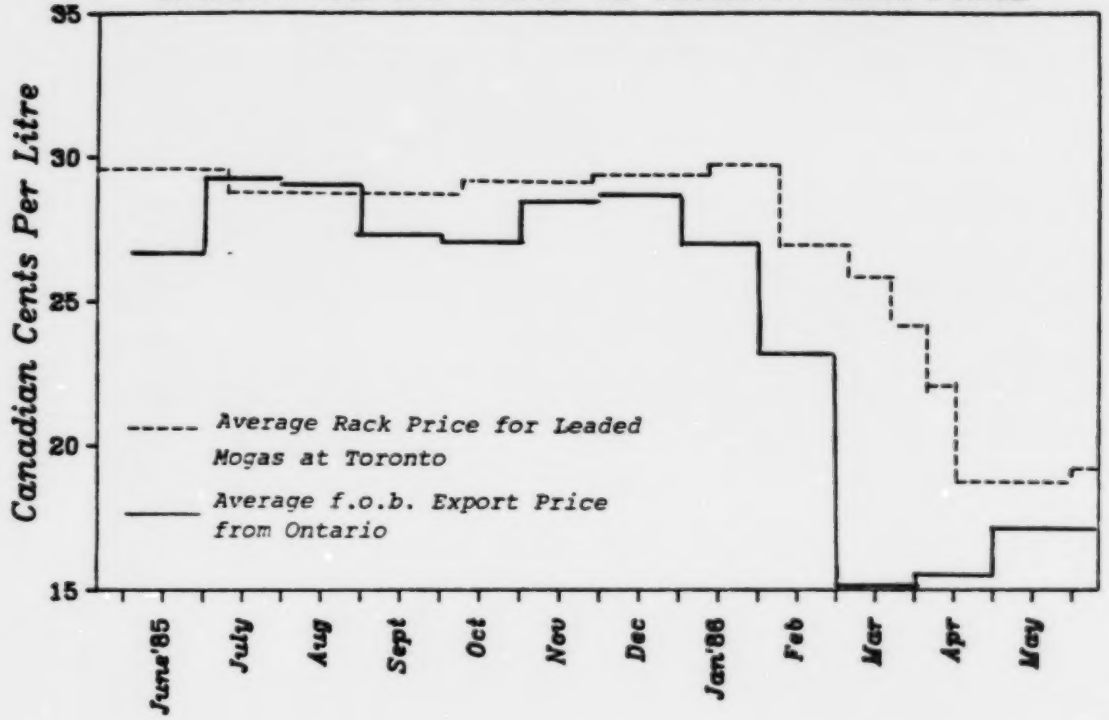
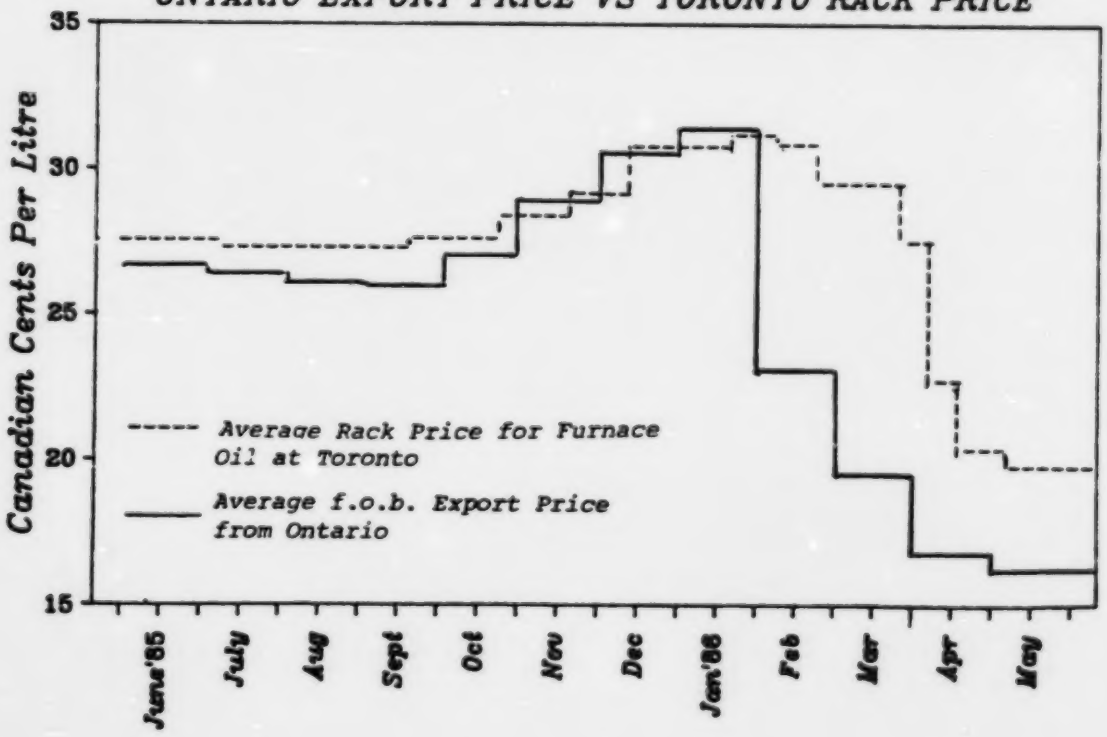


FIGURE 11

MIDDLE DISTILLATE
ONTARIO EXPORT PRICE VS TORONTO RACK PRICE



We have included no comparison for heavy fuel oil because this product is not subject to rack pricing.

As indicated earlier, based on a comparison with U.S. market prices and with import costs, we believe that the prices obtained for export sales were reasonable. Nevertheless, it would seem that Canadian suppliers were prepared to export at prices that were not generally available to Canadian customers. It is interesting to note that several independent marketers exported in these months. These companies must have been able to obtain product from the refiners at prices below those prevailing for domestic consumption otherwise they would have faced a loss on their export transactions. The refiners explained that, on the one hand, domestic product prices lagged the drop in crude oil prices because of the approximate 90 days of inventory they hold in the Canadian distribution system but, on the other hand, that if they were to maintain their export business they had to be competitive in foreign markets.

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Summary of Export Prices

We have reviewed export prices of petroleum prices during the first year of deregulation against three criteria:

(i) average export prices vs average spot prices in the United States;

(ii) average export prices vs average import costs; and

(iii) average export prices vs domestic "rack prices".

Against these three measures, we believe that Canadian exporters, for the most part, obtained reasonable prices for their export sales. There were certain distress sales that realized very low returns but these are not unique to the deregulated environment. Occasional distress sales are a normal occurrence in petroleum product markets. In some instances, as well, attractive prices were obtained where exporters were able to benefit from unique market opportunities.

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Summary of Year One of Deregulation

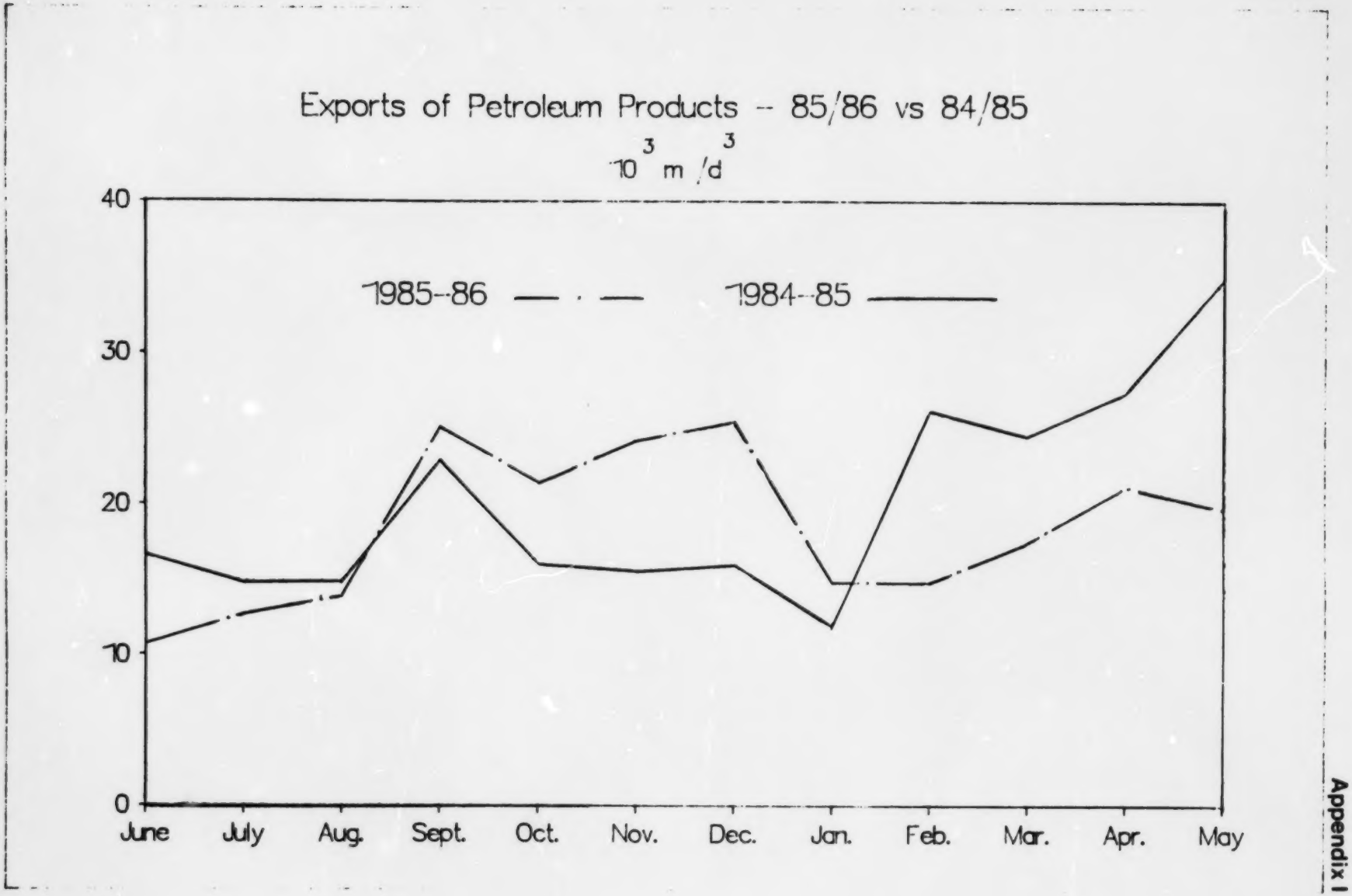
Exporters of petroleum products adjusted well to deregulation judging by the volume of products exported from June 1985 to May 1986. It would seem that the new operating environment did not materially affect the volume of products exported.

During the first year of deregulation, the petroleum industry faced one of its greatest challenges - the reduction in oil prices by approxmimately 50 percent. The removal of administered oil prices and export controls enabled the industry to adjust to the price decreases.

There are certain issues or trends which came to the fore during the first year of deregulation that are noteworthy. An issue that and was perhaps the most controversial, was the exportation of motor gasoline and diesel fuel in early 1986 at prices substantially below the prevailing prices in Canada.

An action that helped consumers but hurt refiners was the emergence of truck imports of gasoline and diesel fuel into areas close to the United States border. This put downward pressure on domestic prices and, in order to meet this new competition, refiners claim they were forced to reduce prices earlier than would normally have been the case or earlier than justified by the 90 days of inventory maintained in the domestic distribution systems.

With the greater freedom to export, more companies are participating in exporting petroleum products, especially independent resellers. This has helped the viability of the independent sector of the downstream industry. Also, Canada is importing from and exporting to a variety of countries in Europe, Asia and Latin America and, clearly, Canada's trade in petroleum products is becoming more widely distributed internationally.


Exports of Petroleum Products -- 85/86 vs 84/85
10 3 m /d 3
40
30
20
10
0
1985--86
1984--85
June
July
Aug.
Sept.
Oct.
Nov.
Dec.
Jan.
Feb.
Mar.
Apr.
May

Appendix I

Appendix II

EXPORTS OF PETROLEUM PRODUCTS

JUNE 1985 - MAY 1986

Actual Exports

m^3

	Motor Gasoline	Middle Distillate	Aviation Turbine Fuel	Heavy Fuel Oil	Partially Processed Oil	Total
Atlantic	652 909	843 299	316	109 979	40 040	1 646 543
Quebec	121 773	346 925	12 230	372 105	86 526	939 559
Ontario	470 981	867 653	0	957 597	40 105	2 336 336
Prairies	280 452	329 878	60 344	95 385	41 027	807 086
B.C.	534 275	364 302	178 148	53 810	12 135	1 142 670
TOTAL	2 060 390	2 752 057	251 038	1 588 876	219 833	6 872 194

Source: NEB Form 307